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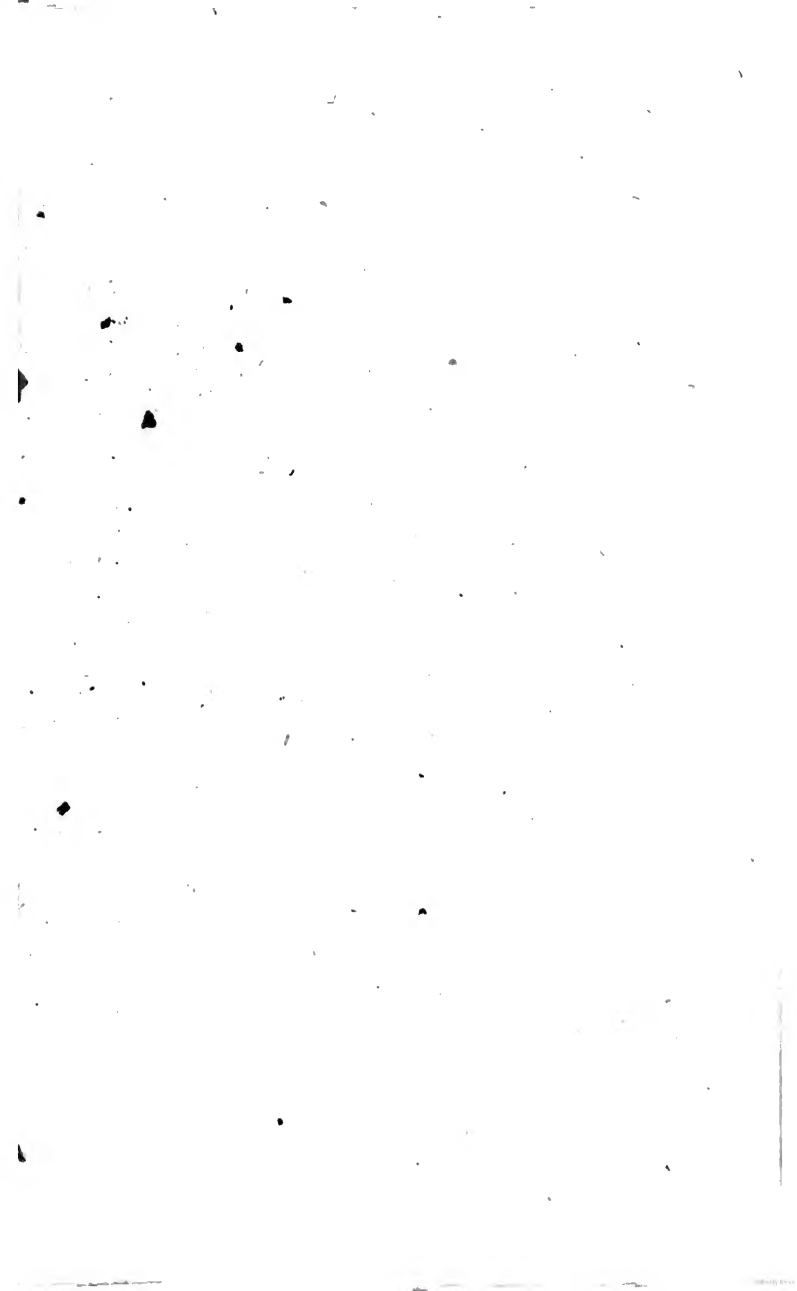
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POLYGRAPHY

or

SHORT-HAND

MADE EASY

To the meanest Capacity:

Being an

UNIVERSAL CHARACTER

Fitted to ALL Languages:

Which may be learnt by this Book,
without the help of a Master:

Invented by

AULAY MACAULAY.

LONDON.

Printed for the AUTHOR, and Sold by
him in the Square, Manchester:

Also Sold by T. OSBORNE, Gray's Inn;
A. MILLAR, Strand; R. HETT, Poultry;
E. COMYNS, Royal-Exchange; I. HINTON,
and I. RIVINGTON, St. Paul's Church Yard;
R. DODSLEY, Pall-mall; W. SANDBY, Fleet
Street, Booksellers in LONDON. And by the
Booksellers in Great Britain and Ireland.

Published according to Act of Parliament,
November the 30. 1747.

In order to preserve my property in this
Book, as well as to prevent y^e Publick from
being imposed upon by spurious Editions; I
hereby declare that I shall sign my Name
to all that are genuine; & whoever presumes
to pirate my Book, will be prosecuted with
the utmost Rigour.

A. Macaulay



24. St.
City
5. 24. 43
48109



I

GEORGE R.

George the Second, by the Grace of God, King of Great Britain, France, and Ireland, Defender of the Faith, &c. To all to whom these Presents shall come Greeting: Whereas Au-lay Mac-au-lay hath humbly represented unto Us, that he hath with great Labour & Expence, written & engraven, & fitted for y^e Press, a Book containing Rules & Characters for writing a Short-hand, after a new Method of his own Invention, entitled, Polygraphy, or Short-hand made Easy to y^e meanest Capacity, & has humbly besought Us to grant him our Royal Privilege & Licence for y^e sole printing & publishing y^e said Work for y^e Term of Fourteen Years; We, being willing to give all due Encouragement to Works of this Nature, are graciously pleased to condescend to his Request, & We do therefore, by these Presents so far as may be agreeable to y^e Statute in that behalf made & provided, grant unto him, y^e said Au-lay Mac-au-lay, his Executors, Administrators & Assigns, our Licence for y^e sole printing & publishing y^e said Work, for y^e Term

of Fourteen Years, to be computed from y^e Date
 hereof, strictly forbidding all our Subjects within
 our Kingdoms & Dominions, to Re-print or
 Abridge y^e same, either in y^e like, or any other Volume
 or Volumes whatsoever, or to import, buy, vend, utter or
 distribute any Copies thereof, Re-printed beyond
 the Seas, during y^e aforesaid Term of Fourteen
 Years, without y^e Consent or Approbation of the
 said Au-lay Mac-au-lay, his Heirs, Executors &
 Assigns, under their Hands & Seals first had &
 obtained, as they will answer y^e contrary at their
 Perils: Whereof y^e Commissioners & other Officers
 of our Customs; y^e Masters, Wardens, & Com-
 pany of Stationers, are to take Notice that due
 Obedience be rendered to our Pleasure herein de-
 clared. Given at our Court at S.^t James's, y^e Four-
 teenth Day of November, 1746, in the Twentieth
 Year of our Reign.

By his Majesty's Command,

HOLLES NEWCASTLE.

The Certificate.

We whose Names are hereunto Subscribed, declare, that we have seen a little Boy, both write *Aulay* *Macaulay's* Short-hand, & read it as distinct ly as if what was therein contained had been penned in common hand writing, & we have been credibly informed, that this Boy was taught y^e Art in four lessons, at a time, when he was not quite arrived to y^e Age of seven Years & an half, & y^e Boy himself told us, that he should not be eight years old till y^e 30th of Jan. 1747/8.

John Ishe Esq^r Gen.^l Post Office London;

John Butler, Southwark, Gent.

Joseph Stanton, Friday Street, Gent. } Attorneys at Law.

Edw.^d Rowe Mores, Queen's Coll. Oxon.

James Crockatt, Cloak Lane, Merchant.

A. Macdane, Cheapside.

D. Macdane, Newgate Street. } Linnen Drapers.

W.^m Grace, St. Martins le Grand. }

John Savill, Cateaton Street.

Rich.^d Holden, Bartholomew Lane. } Warehouse Men.

Michael Bland, Walling Street.

W.^m Stevens Jun.^r Queenhithe. Malt Factor.

Jonathan Clarke, King Street.

Advertisement.

There is a Notion prevails among many People, to y^e prejudice of all kinds of Short-hand; which is this. That when a Person sets down a Memorandum in his pocket Book in Short-hand, it is lost, in case of Death or any other accident, to y^e rest of y^e World, though it may contain things of great Consequence to other People. But when this is rightly considered, it will be found a very strong recommendation of my Art, for I affirm, and y^e Certificate annexed to this Book, sufficiently proves y^e truth of what I affirm, that if any Person makes use of my long Short hand, which he will certainly do, in case he designs that what he writes should be read by another Person, it will be as legible to any one acquainted with this Art, as if it was writ in Round Hand. But, if Gentlemen think fit to invent and use abbreviations of their own with a View to keep what they write as a secret from the rest of Mankind, this can be no sort of objection to my Method, which is entirely fitted for general Use, and not for private, or particular Conveniency.

To the Reader

The following concise System of Short-hand, which I hope will appear as easy, as I am sure it will prove useful, was not y^e effect of a sudden thought, or y^e hasty issue of a bold & happy Invention. I had a strong notion of y^e many advantages that might be derived from Short-hand, I found many difficulties in using those already invented. This put me upon thinking of a new Short-hand; and what cost me several years trouble & meditation, I have freely & faithfully imparted, in a sm^{ll} number of Pages, the contents of which may be speedily acquired; as is sufficiently demonstrated, by y^e little Boy before mentioned. The chief difficulties I found in y^e Short-hands already published, were y^e obscurity, length, and number of their Rules; the uncertainty, confusion, and perplexity of their Characters; the long practice necessary to be able to write; the pain & labour requisite to read at any distance of time, & above all, y^e heavy burthen; imposed on the Memory; which made it equally tedious to learn this Art, and impracticable to retain it. My view therefore was to find out a Short-hand as swift as any of these, and yet unembarrassed with such inconveniences. In order to this, I considered that Short-hand, was no more than a contraction of y^e long, and this put me upon considering the Alphabet; in which, as y^e whole secret of writing lies, so I began to imagin, that I might find there y^e secret, of short writing also. A little attention convinced me, that I was not mistaken,

and, that y^e composing of a new Alphabet, of easy, simple, and distinct Characters, would go a great way towards answering my End. — After I had formed an Alphabet, I found that Characters for double & treble Consonants, were likewise necessary, and, at y^e same time saw, that my stock of plain & distinct Marks from straight & curve lines, was exhausted, I then bethought my self, that they might be three ways varied by y^e alteration of size, & once, by y^e change of place. By repeated trials, I found this Method answer, & fixed the double & treble Consonants so, as that they might be wrote with y^e same facility & distinctness, and yet with y^e very same Characters, that I had employed to represent y^e Alphabet. — One of the best Rules in other Short-hands, I found to be dotting for Vowels, which, in comparison of ordinary writing, is certainly very expeditious; but perceiving, that taking of y^e Pen, & considering where to place y^e Dot, was equal to one stroke, y^e dot it self, another, & returning to begin y^e next Character taking more time than was necessary, to a third, I resolved to drop that way, and to insert y^e Vowels; which, at y^e same time that it makes my short-hand much more legible, renders it also quicker and more convenient. — As for arbitrary Characters, I found, that in every profession, numbers of them were necessary for technical terms, w^{ch} embarrassed the Art excessively, indeed, split it into several; so that y^e Divine stood in need of one, the Lawyer of another, the Physician of a third, &c. &c. &c. and, that to comprehend, & use them all, was beyond y^e power of Memory; —

and reflecting a little upon this, I found, that, except using y^e Characters before established for the commonest Words, there was no need at all for these arbitrary Characters. — By reflecting further upon this, I found, y^e terminations also, might be dispensed with, and, that my Short-hand, being as perspicuous, as the long, would admit of the same contractions, without creating, either embarrassment, or confusion; in short, that, by writing y^e radical part of a Word of many Syllables, such as, corrup for corruption, abom for abominable, confed for confederate, extrav for extravagant, legit for legitimate, orig for original, congrat for congratulate, I might as necessity required, shorten my Short-hand, so as to make all y^e dispatch necessary, & yet leave it clear and legible. — Upon these Principles, founded in y^e nature of y^e Art, in y^e nature of things, & in y^e relation of Characters, to Ideas, I framed this new Method of Short-hand, the practice of which, as I am thoroughly convinced from my own experience and that of many others, soon begets such a habit of writing with ease & reading without difficulty, by y^e spontaneous occurring of Characters to y^e Mind when excited by y^e Ear, and to y^e Memory when presented to y^e Sight, as effectually removes all y^e difficulties, that formerly affected this way of expressing Words. — A long Introduction to a concise Method, would be equally unnecessary & absurd. — In the following Pages, all that I know, & all that is necessary to be known, will be found as plainly, and as succinctly set down, as it was in my power to give

it, and, that the Reader may reap the same advantages therefrom, that he expects, that I have promised, and that I am perfectly sensible, may be attained, is the wish and prayer, of

*His obliged and grateful
humble Servant,*

A. MACAULAY.

Introduction.

The very name of Short-hand expresses its nature; it has the same relation to Speech that ordinary Writing has to Sentiment, and, as the latter serves to inform another of what we think, so the former enables us to preserve what is delivered by a Speaker. Besides, Short-hand has many other uses, & therefore we need not wonder if in an Age so active & enterprising as this many attempts have been made to carry this Art to its utmost height of perfection.

This must necessarily consist in having but a few Characters, that the Memory may not be burthened; that they may be quickly made & easily joined, that the Hand may not be retarded in its expedition, & so clear in themselves, that they may be known at first sight.

To attain these Ends, I have used my utmost endeavours; & from the following Tables, the Learner will see that I make use of as few Characters as possible; that they are as simple as can be imagined; that they are joined with the greatest facility; & so distinct, as not to occasion the least hesitation in the Reading.

In order to acquire this Method, only those Characters & their Significations, which are contained in the 8th & 9th Pages of this Book, are to be got by Heart; after that the Learner is to exercise himself in Reading and Copying the Specimens, which will put an end to all his Labour, & make him imperceptibly Master of an Art, which at first sight he might scarce think it possible to attain.

This is all I have to say, by way of Introduction; I put the whole of my Cause upon the Learner's diligence & attention, & dare then boldly appeal to his own experience for the truth of every Syllable I have advanced, either here or in my proposals as to the advantages of my Method.

The Alphabet and its use.

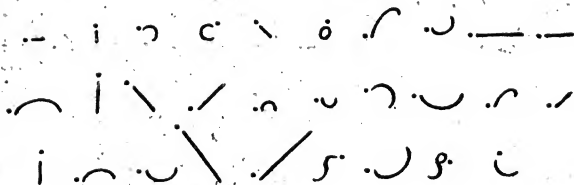
In assigning Characters for y^e common Alphabet, I have taken all possible care to render them easy, distinct, & convenient, which are y^e Chief Things requisite in a Short-hand, that is, not only to be Written with speed, but to remain always legible.

It's very possible that at first sight they may appear uncouth to a Learner; but by taking three at a time, and Writing them, two or three times over, y^e whole will be much sooner acquired and retained than can well be imagined.

These Characters are to be considered in a double light: first, as representing y^e Letters of y^e Alphabet, of which, a, o, and u have double Characters to Facilitate their joining.

Secondly they are also Arbitrary Marks for y^e Words that are against them, for w^{ch} they always stand, when by themselves; but, when nearly situated or joined together, they are to be read as letters, except in those Words that they stand for when compounded with others.

The following Characters have points placed before them, to shew where they are begun, that they may be y^e more readily made; as to y^e perpendicular strokes, they are begun at either end as will best join with y^e succeeding Characters:



The Reader is to observe, that, in this & y^e following Tables, I have placed all y^e Characters in my Method in Alphabetical order, with no other Intention than that y^e Learner may more readily find any of them he may be in doubt about, when he first attempts to Read y^e Specimen; but would recommend y^e 4th and 9th Pages, as y^e most expeditious way to attain this Art, these Characters being here placed in a Comparative position:—

a	—	a, and	o	∪	otherwise
b	∪	but	p	∪	put
c	c	come	qu	∪	question.
d	∪	do	r	c	right
e	o	he, ever	s	∪	said
f	c	for	t	∪	to
g	∪	God, give	u	∪	upon
h	—	him, have	u	∪	unto
i	—	in	v	∪	very
k	∪	keep	w	∪	with
l	∪	Lord, let	x	∪	expect
m	∪	me	y	∪	you
n	∪	not	z	∪	zeal
o	∪	out		∪	&c

Of the Double and Treble
Consonants?

The same Ends, that were considered in y^e Alphabet, are kept in view also in the double & treble Consonants, which are all placed above y^e line, whereas y^e single Consonants are all upon it.

These likewise serve in a double Capacity, that is, as Consonants when joined, or when in y^e middle or termination of Words they stand disjoined, but as Arbitrary Charact^r. for Words, when alone, so that it is impossible to mistake either in using or in Read^g them.

These are also to be Written by three at a time, till y^e Learner is become perfect, that is to say, can readily make them, & easily distinguish them when made, in both Capacities, that is, as Consonants, & as Characters.

NB: This Art has been very much per-
 plexed by y^e use of Arbitrary Characters, of
 which, except those four at y^e head of y^e next
 page, I have none: For, as y^e Letters of y^e Al-
 phabet & y^e double & treble Consonants must
 be remembred, y^e making these answer y^e end of
 Arbitrary Characters for common Words begining with
 the same Letters makes them y^e more easily retained.

The following Characters are begun where the dots are prefixed:

i n) v a) e i s

nd	.	hand	gl	and	glad, glory
of	.	off	gn	9	gnash
to	,	ing	gr	—	great
ts	v	ings	kn	7	know
	.		ph	3	phantastick
bl	7	blefs	pl	—	plain
br	9	brought	pr	—	practice
ch	—	child	rh	8	rhyme
cl	7	clear	sc	/	scorn
cr	'	crown	sh	/	shall
dr	7	drove, drive	sk	7	skill
dw	u	dwell	sl	7	sleep
fl	\	flame	sm	o	small, of
fr	7	from	sn	o	snuff, of
gh	v	ght, ghost	sp	7	spoil

The Figure Characters and their Use.

As no Strokes can be more simple than my Figure Characters, consequently they may be much quicker made than the common Figures; as is evident from the following Numbers, of which the Reader will be a judge, the Numbers being first specified in the common Figures, and my Figure Characters placed underneath them, which represent the same Numbers:—

1	2	3	4	5	6	7	8	9	0
—	\		/	∩	∪	∪	∪	∪	∪
10	11	12	13	14	15	16	17	18	19
∪	—	∪	∪	∪	∪	∪	∪	∪	—
20	21	22	23	24	25	26	27	28	29
∪	∪	∪	∪	∪	∪	∪	∪	∪	∪
30	40	50	60	70	80	90	100	101	102
∪	∪	∪	∪	∪	∪	∪	∪	∪	∪

And in y^e same manner all other Numbers may be Written. If it were required to set down the following Number, 4,343,434, it is expressed by my Characters in the Letter W, which Number, you know, being Written in full length, Contains the following Words, Four Million, three Hundred and forty three Thousand, four Hundred and Thirty-four. It is hardly possible to Conceive how many different Numbers may be Signified in the Letter W, only by changing or adding Characters at the beginning or ending. —

squ	u	square	spr)	spring
st	\	stand	str	f	strong
sn	S	sweet	thr	S	through
th	!	the, thee.	thw	9	thwart
tr	!	trust			
tn	\	twinkle	1	—	one
wh	\	which	2	\	two
wr	?	wrong	3	!	three
Chr	f	Christ	4	/	four
phr	—	phrase	5	^	five
sch	f	scheme	6)	six
scr	u	scrip	7	u	seven
shr	u	shroud	8	c	eight
skr)	skreen	9	=	nine
spl	c	splend	0	o	cipher

The whole Art in one View

Shewing, that the same Characters, when plac'd above, the Line, differ in Signification from those upon it.

a and —	i in —	h him, have —	d do \	m me \	v very \
gl glad, glory —	pr practice —	gr great —	wh which \	st stand \	fl flame \
a and 	t to 	l lord, let 	g god, give)	y you)	
th the, thee 	tr ch trust, child 	pl plain 	ph phantastic)	spr spring)	skr skreen)
b but)	p put)		o out)	u upon)	k keep)
bl blefs)	sl sleep)		sm small)	dw dwell)	
c come c			o otherwise)	u unto)	qu question)
spl splend c			sn snuff)	scr scrip)	

(9)

r right C	f for C		fr from)	kn know)	a and, gl -
cl, str clear, strong C C	sch scheme C	chr christ C	gh, ght ghost v	ts ings v	o of, sm C
s said /	n not /	w with /	squ square C	shr shroud C	g of, sm C
cr crown /	sh shall /	sc scorne /	Rest of the Characters not similar to one another.		
x expect S			e he, ever o	&c C	sk skill J
thr through S	phr phrase S	sw sweet S	z zeal g	a and, th 	i pr -
and hand .	off off .	u scr C	gn gnash 9	thw thwart 9	rh rhyme 8
br brought 1	wr wrong J	u dw C	ing : When placed near a Character.		
sp spoil C	dr drive, drive C	tw twinkle C	1 2 3 4 5 6 7 8 9 0 - \ / C U C ± 0		

Ajoining Table

In which Consonants precede Vowels.

ba be bi bo bu ca ce ci co cu
 2 3 2 3 3 6 6 7 8 9

da de di do du fa fe fi fo fu
 1 2 3 4 5 6 7 8 9 10

ga ge gi go gu ha he hi ho hu
 1 2 3 4 5 6 7 8 9 10

ka ke ki ko ku la le li lo lu
 1 2 3 4 5 6 7 8 9 10

ma me mi mo mu na ne ni no nu
 1 2 3 4 5 6 7 8 9 10

pa pe pi po pu qua que qui quo qu
 1 2 3 4 5 6 7 8 9 10

ra re ri ro ru sa se si so su
 1 2 3 4 5 6 7 8 9 10

ta te ti to tu va ve vi vo vu
 1 2 3 4 5 6 7 8 9 10

wa we wi wo wu xa xe xi xo xu
 1 2 3 4 5 6 7 8 9 10

ya ye yi yo yu za ze zi zo zu
 1 2 3 4 5 6 7 8 9 10

Alike Table

Wherein Vowels precede Consonants.

ab eb ib ob ub ac ec ic oc uc

ad ed id od ud af ef if of uf

ag eg ig og ug ah eh ih oh uh

ak ek ik ok uk al el il ol ul

am em im om um an en in on un

ap ep ip op up aq eq iq oq uq

ar er ir or ur as es is os us

at et it ot ut av ev iv ov uv

aw ew iw ow uw ax ex ix ox ux

ay ey iy oy uy az ez iz oz uz

Instructions for Beginners .

As the chief End of this Art is to Write quick, some Licences, in point of Orthography, have been always claimed and Exercised therein; therefore y^e Reader will observe, that the Character i is frequently used instead of that for y, and, for y^e same Reason, y^e Characters for s and k are found in y^e place of c.

It is proper also to acquaint y^e Reader, that he will meet with many Instances of Letters omitted, because, not absolutely necessary to fix either y^e Sound or y^e Sense of y^e Words, in which they occur; but, though this may be done, for y^e sake of quickness in Writing Short-hand, yet when it's transcribed into the common Writing, those Letters may be easily Replaced.

At the bottom of y^e Page is an Example of y^e first Psalm, written in a small Character, which when y^e Art is thoroughly acquired, will be very easy, but, till then, the Learner is advised to write in a large Character like y^e other Specimens, for the sake of distinctness, and obtaining a habit of making every Character Exactly. —

Psalm I In the Old Testament, Written in the long Short-hand :

2
3
+
6

*Remarks on the manner of Writing**SHORT-HAND.*

As in common Writing, by joining the Letters together, Words are compos'd; so my Characters, which represent those Letters, are in like manner equally capable of forming any Word whatsoever if properly joined; As for Example;—

In the Word Man, your Character for m is made thus ^m then make your Character ^a at the Foot of ^m as thus ^m lastly draw your Character ⁿ sloping from the ^a as thus ^m and in y^e same way, by joining y^e proper Characters together, any other Word may be Written, as is sufficiently Demonstrated in y^e following Specimens:

Psalms I In the Old Testament,

Written in the long Short-hand, wherein all y^e Vowels are included in each Word:

2 — ' V 4 B / — ' a v d

• ' u b : u o p s 19 / ' / . z :

2 s 9 / ' n • ' h x e n d e 2 d v

— / ' V • ' h : . — /

3 V / ' o d l d l . x . o ' 2

x	
4	
5	
6	
<h2>Pfalm II.</h2> <p><i>Written in the long Short-hand.</i></p>	
2	

3 5-1! hz:.. 5-1 ✓

3 hz: 1 x | ✓ hz hz

hz:.. 01 / hz hz' ✓ x

4 0.4 19 / 1 \ / / 1: 1

5 hz / 2 / hz x /

hz 2 / 1:.. 1

6 2 / / hz x 1

1 1 1 1 1 1

7 1 x - 1 hz' 1: 1 hz

1 / 1: hz 1 1: 1

8 1 - - 1 x 1: 1

1 1 1 1 1

1 1:.. 1 hz hz'

9 1 1 1 1 x 1 1

1 / 1: hz 1 1 1

10

/ 2 6 1 a - 2 3 4 x 2
 2 3 4 5 6 7 8 9 10 11 12

11

2 3 4 5 6 7 8 9 10 11 12

12

2 3 4 5 6 7 8 9 10 11 12

2 3 4 5 6 7 8 9 10 11 12

2 3 4 5 6 7 8 9 10 11 12

2 3 4 5 6 7 8 9 10 11 12

Pfalm III.

Written in the long Short-hand.

2 3 4 5 6 7 8 9 10 11 12

2 3 4 5 6 7 8 9 10 11 12

2

2 3 4 5 6 7 8 9 10 11 12

3

2 3 4 5 6 7 8 9 10 11 12

2 3 4 5 6 7 8 9 10 11 12

4 $\text{Lr} \cdot \text{L} \text{---} \text{x} \text{---} \text{r} \text{u}$

$\text{h} / \text{L} \text{h} \text{g} : \text{---} \text{---} \text{---} \text{r}$

5 $\text{m} \text{---} \text{---} \text{p} \text{---} \text{---} \text{d} : \text{x} \text{---} \text{h}$

$\text{w} \cdot \text{?} : \text{---} \text{h} : \text{r}' \text{h}$

6 $\text{w} \text{r} \text{---} \text{x} \text{---} \text{p} / \text{a} \text{z} \text{---} \text{r}$

$\text{w} \text{r} : \text{z} : \text{---} \text{r} \text{d} \text{h} \text{---} \text{r}$

7 $\text{w} \text{r} \text{---} \text{x} \text{---} \text{r} : \text{---} \text{h} : \text{r}$

$\text{---} \text{---} \text{---} \text{r} : \text{---} \text{h} \text{---} \text{---} \text{r}$

$\text{---} \text{---} \text{---} \text{r} \text{---} \text{---} \text{r} : \text{h}$

$\text{---} \text{---} \text{---} \text{r} \cdot \text{---} \text{---} \text{---} \text{x}$

8 $\text{---} \text{---} \text{---} \text{r} \text{---} \text{---} \text{h} : \text{---} \text{---}$

$\text{---} \text{---} \text{---} \text{r} : \text{---}$



Genesis Chap: I.

Written in the long Short-hand.

1. / ' 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100
2. / ' 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100
3. / ' 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100
4. / ' 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100
5. / ' 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100
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الحمد لله الذي هدانا لهذا...

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(Handwritten musical notation on a staff)

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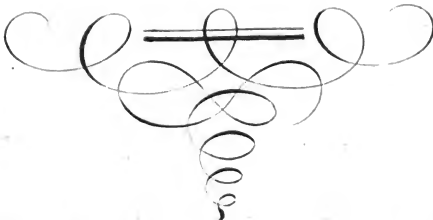
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Genesis Chap:XL.

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Genesis Chap: XLI.

Written in the long Short-hand

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$\frac{1}{2} \cdot \frac{1}{2} = \frac{1}{4}$

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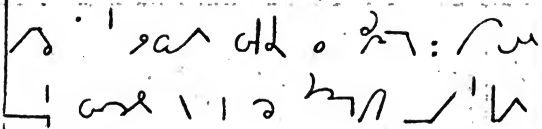
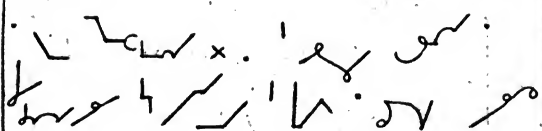

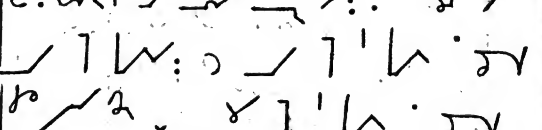
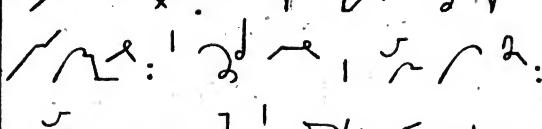
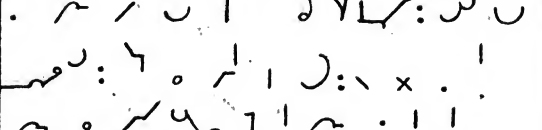
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11/10/2020

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 29 $\text{h} \times \dots \text{h} \text{m} _ / \text{h} \text{m} \text{h} \text{m} :$
 $_ / \text{h} : \text{h} : \dots \text{h} _ / \text{h}$
 30 $\text{h} \text{m} \text{h} : \text{re} \times \text{' } _ / \text{h} : \text{h} _ /$
 $\text{h} \text{m} : \text{h} : \text{h} \text{m} \text{h} \text{m} \text{h} \text{m} :$
 $\text{h} \text{m} \text{h} \text{m} \text{h} \text{m} \text{h} \text{m} :$
 31 $\times : _ / _ / _ / \text{h} \text{m} : _ / \text{h} \text{m} :$
 32 $\text{h} \text{m} \text{h} \text{m} \text{h} \text{m} \times _ / \text{h} \text{m} \text{h} \text{m} :$
 $\text{h} \text{m} \text{h} \text{m} \text{h} \text{m} \text{h} \text{m} :$

37 x

38 x

38 x

Genesis Chap. XLIII

In the long Short-hand

2

1. $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$
3. $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$
4. $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$
5. $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$
6. $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$
7. $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$

17 \ 1 / x . ' \ \ / 2 :

1 \ \ / 1 \ \ / 5 x

18 . \ \ / 3 : 2 1 \ /

5 : 2 : 1 : 2 : 1 : 2

4 / 1 1 1 1 1 1

4 : 1 / 1 : 4 . 1 1 1 1

5 1 2 : 1 2 : 1 2

19 \ 2 \ 4 . 1 2 x . 2 4

1 \ \ / 1 : 5 : 2 1 2

20 / \ 1 1 1 1 x . 1 : 2

1 : 1 4 \ 1 1 1 1

21 1 2 1 x . 1 4 2 \ 4

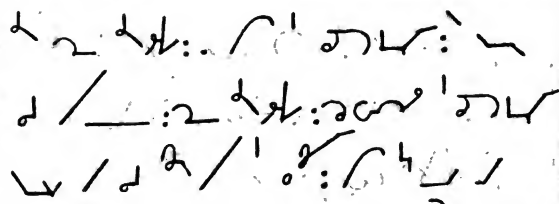
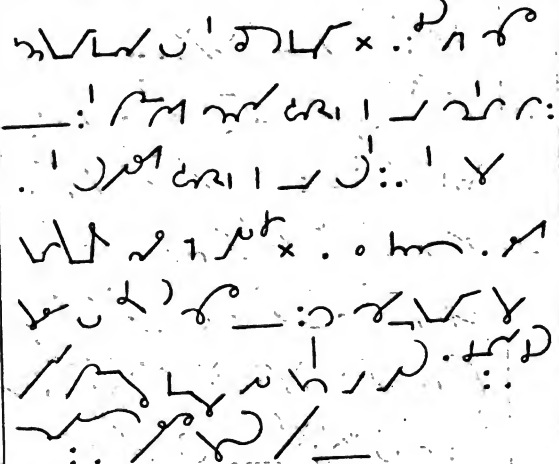
1 \ : 4 / 2 1 2 : .

2 : 2 \ 1 1 / 1 1

1 2 : 1 1 1 / 1 1

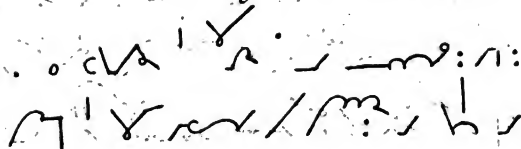
1 2 : 1 1 1 / 1 1

- 22 . / _ 7 5 / / m . x
- 23 . 4 w _ / 7 w / / m . /
- 23 1 2 m : / d q w m
- 23 26 : 1 . . x s s r m / w
- 24 m n j d . m s : / m s : 1 2
- 24 s s r m / s s r m 1 2
- 24 m n j d . m s : / m s : 1 2
- 25 26 : 1 . . x s s r m / w
- 25 26 : 1 . . x s s r m / w
- 26 26 : 1 . . x s s r m / w
- 27 . m n j d . m s : / m s : 1 2

33 
 34 

Genesis Chap. XLIV

In the long Short-hand



Handwritten musical notation on a single staff, consisting of seven numbered measures (1-7). The notation is a form of musical shorthand using various symbols, including vertical lines, horizontal lines, and stylized characters, possibly representing notes, rests, and other musical elements. The notation is written in a cursive, handwritten style.

13

14

15

16

17

c w / u : u , L G m w

24 x . - a 2 / a 3 u L
 w L r : / h _ m

25 . L h x . m r : u . .

26 ~ n - h m x : / : / d
 w : m m r / n :
 / w : r / L / a

27 . L m m r / n x
 . L m L r , u n : u

28 L m m x . a
 m ' . - m : m

29 m : . - m / m x . r
 u m L m : . L m

30 - : / " w L - m /
 m / a - x m - c

Genesis Chap. XLV

In the long Shorthand

1. *And Joseph said unto his brethren, I am Joseph, which I told unto you. And now ye see, and ye know that I am Joseph.*
 2. *And he said unto his brethren, I am Joseph, which I told unto you. And now ye see, and ye know that I am Joseph.*
 3. *And he said unto his brethren, I am Joseph, which I told unto you. And now ye see, and ye know that I am Joseph.*
 4. *And he said unto his brethren, I am Joseph, which I told unto you. And now ye see, and ye know that I am Joseph.*
 5. *And he said unto his brethren, I am Joseph, which I told unto you. And now ye see, and ye know that I am Joseph.*

١ ٢ ٣ ٤ ٥ ٦ ٧ ٨ ٩ ١٠ ١١ ١٢ ١٣ ١٤ ١٥ ١٦ ١٧ ١٨ ١٩ ٢٠
 ٢١ ٢٢ ٢٣ ٢٤ ٢٥ ٢٦ ٢٧ ٢٨ ٢٩ ٣٠ ٣١ ٣٢ ٣٣ ٣٤ ٣٥ ٣٦ ٣٧ ٣٨ ٣٩ ٤٠
 ٤١ ٤٢ ٤٣ ٤٤ ٤٥ ٤٦ ٤٧ ٤٨ ٤٩ ٥٠ ٥١ ٥٢ ٥٣ ٥٤ ٥٥ ٥٦ ٥٧ ٥٨ ٥٩ ٦٠

11 ٦١ ٦٢ ٦٣ ٦٤ ٦٥ ٦٦ ٦٧ ٦٨ ٦٩ ٧٠ ٧١ ٧٢ ٧٣ ٧٤ ٧٥ ٧٦ ٧٧ ٧٨ ٧٩ ٨٠
 ٨١ ٨٢ ٨٣ ٨٤ ٨٥ ٨٦ ٨٧ ٨٨ ٨٩ ٩٠ ٩١ ٩٢ ٩٣ ٩٤ ٩٥ ٩٦ ٩٧ ٩٨ ٩٩ ١٠٠

12 ١٠١ ١٠٢ ١٠٣ ١٠٤ ١٠٥ ١٠٦ ١٠٧ ١٠٨ ١٠٩ ١١٠ ١١١ ١١٢ ١١٣ ١١٤ ١١٥ ١١٦ ١١٧ ١١٨ ١١٩ ١٢٠
 ١٢١ ١٢٢ ١٢٣ ١٢٤ ١٢٥ ١٢٦ ١٢٧ ١٢٨ ١٢٩ ١٣٠ ١٣١ ١٣٢ ١٣٣ ١٣٤ ١٣٥ ١٣٦ ١٣٧ ١٣٨ ١٣٩ ١٤٠

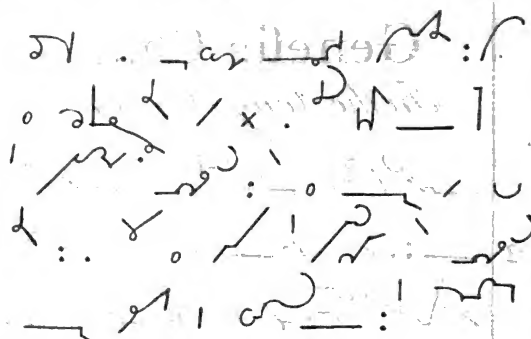
13 ١٤١ ١٤٢ ١٤٣ ١٤٤ ١٤٥ ١٤٦ ١٤٧ ١٤٨ ١٤٩ ١٥٠ ١٥١ ١٥٢ ١٥٣ ١٥٤ ١٥٥ ١٥٦ ١٥٧ ١٥٨ ١٥٩ ١٦٠
 ١٦١ ١٦٢ ١٦٣ ١٦٤ ١٦٥ ١٦٦ ١٦٧ ١٦٨ ١٦٩ ١٧٠ ١٧١ ١٧٢ ١٧٣ ١٧٤ ١٧٥ ١٧٦ ١٧٧ ١٧٨ ١٧٩ ١٨٠
 ١٨١ ١٨٢ ١٨٣ ١٨٤ ١٨٥ ١٨٦ ١٨٧ ١٨٨ ١٨٩ ١٩٠ ١٩١ ١٩٢ ١٩٣ ١٩٤ ١٩٥ ١٩٦ ١٩٧ ١٩٨ ١٩٩ ٢٠٠

14 ٢٠١ ٢٠٢ ٢٠٣ ٢٠٤ ٢٠٥ ٢٠٦ ٢٠٧ ٢٠٨ ٢٠٩ ٢١٠ ٢١١ ٢١٢ ٢١٣ ٢١٤ ٢١٥ ٢١٦ ٢١٧ ٢١٨ ٢١٩ ٢٢٠
 ٢٢١ ٢٢٢ ٢٢٣ ٢٢٤ ٢٢٥ ٢٢٦ ٢٢٧ ٢٢٨ ٢٢٩ ٢٣٠ ٢٣١ ٢٣٢ ٢٣٣ ٢٣٤ ٢٣٥ ٢٣٦ ٢٣٧ ٢٣٨ ٢٣٩ ٢٤٠

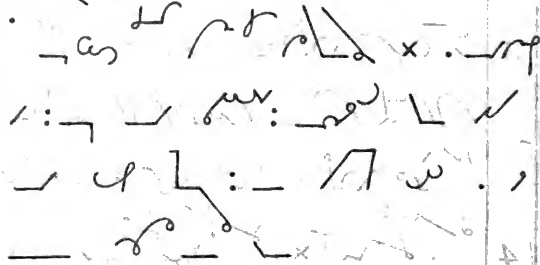
15 ٢٤١ ٢٤٢ ٢٤٣ ٢٤٤ ٢٤٥ ٢٤٦ ٢٤٧ ٢٤٨ ٢٤٩ ٢٥٠ ٢٥١ ٢٥٢ ٢٥٣ ٢٥٤ ٢٥٥ ٢٥٦ ٢٥٧ ٢٥٨ ٢٥٩ ٢٦٠
 ٢٦١ ٢٦٢ ٢٦٣ ٢٦٤ ٢٦٥ ٢٦٦ ٢٦٧ ٢٦٨ ٢٦٩ ٢٧٠ ٢٧١ ٢٧٢ ٢٧٣ ٢٧٤ ٢٧٥ ٢٧٦ ٢٧٧ ٢٧٨ ٢٧٩ ٢٨٠

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Genesis Chap. I

In the long Short-hand

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Matthew Chap. III
In the long Short-hand

॥ ॐ नमो भगवते वासुदेवाय ॥

2. $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$

3 1: x / L / 0 4 / - m b . 2 1 - u y s y : r i :

[illegible]

4 | $k: \omega \rightarrow \mathbb{R}_x^1$ $\omega \sim \omega'$ $\Rightarrow k(\omega) = k(\omega')$

[illegible]

5. $\therefore \Delta \text{Horn. } \Delta_{\text{Horn.}} \times \Delta_{\text{Horn.}}$

[illegible]

6 $\ln \sqrt{x} \cdot \ln 2$

7. $\frac{1}{x^2} = x^{-2}$

61-214:0/04:00000000

8 | $\frac{1}{x^2} = x^{-2}$

6. $\frac{1}{2} \sqrt{1+x^2} + \frac{1}{2} \ln |x + \sqrt{1+x^2}| + C$

[illegible]

پہلے اس مسئلہ کا خلاصہ درج ہے:

10 $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$

	<p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p>	<p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p>
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As I have asserted, that my Short-hand has this peculiar advantage of suiting all Languages, I thought it requisite, to give the following Specimens, as incontestible proofs of its being as universal, as I represent it.

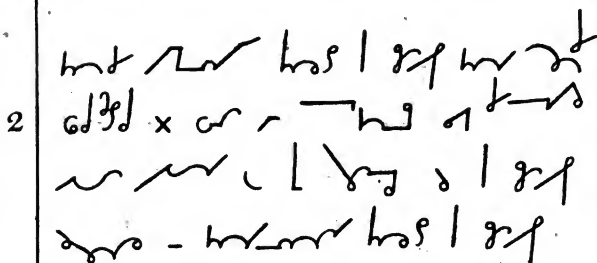
Pfalm CXVII in Welsh

W/! S r t a S d l e h m
 2 S d m h x o t a o m
 h m h S d h S r t a S
 r t a o S h W/! S r t a

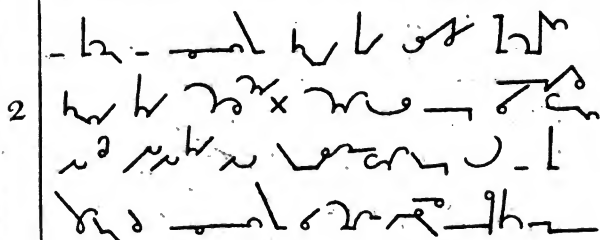
Pfalm CXVII in Dutch

W/! S r t a S d l e h m
 2 S d m h x o t a o m
 h m h S d h S r t a S
 r t a o S h W/! S r t a

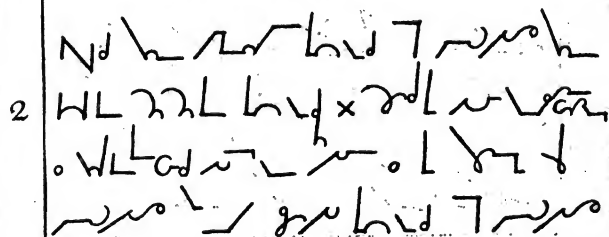
Pfalm CXVII in French



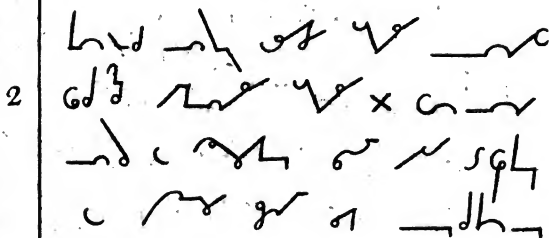
Pfalm CXVII in Spanish



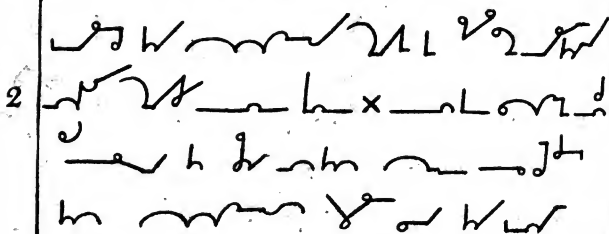
Pfalm CXVII in Italian



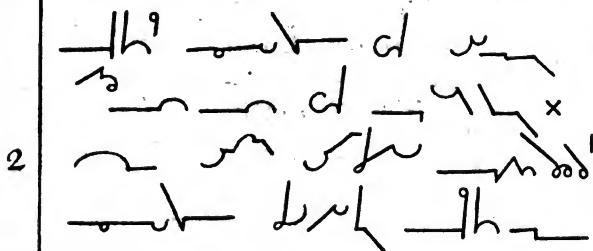
Pfalm CXVII in Latin



Pfalm CXVII in Greek



Pfalm CXVII in Hebrew



Remarks on the nature of Abbreviations.

It has been observed, that besides y^e common Rules already laid down, it is requisite in order to carry Short-hand to its utmost perfection, & enable y^e Learner to keep up with the Speaker, to put him into a Method of abbreviating, without having recourse to arbitrary Characters. This Method consists in writing only y^e radical Letters of a Word, that is, such Letters, as being pronounced, will give the sound of y^e Word for which they stand, as for Instance, n d v r, which sounded Literatim, produce y^e Word endeavour, m p h, w.^{ch} leads to impeach, & s, which clearly marks an excess, y^e short-hand Characters for these Letters, answers all y^e Ends of arbitrary Characters, as y^e Reader will perceive, by y^e subsequent Specimens, neither does this at all corrupt Orthography, because, when y^e short-hand is transcribed, y^e quiescent or unsounded Letters, are replaced.

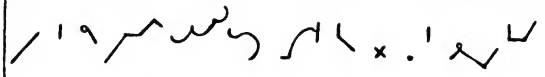
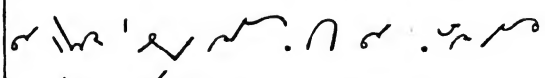
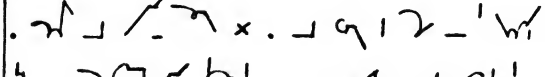
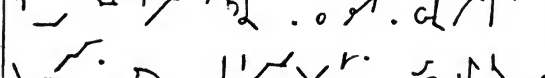
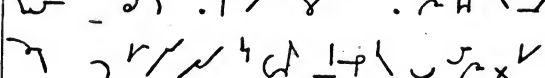
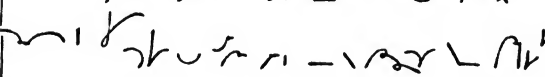

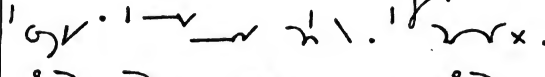
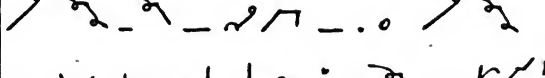
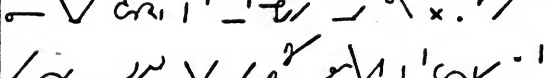
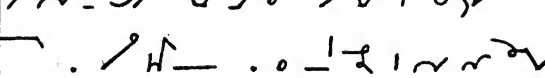
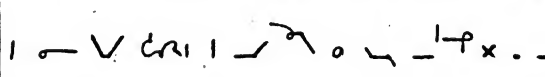
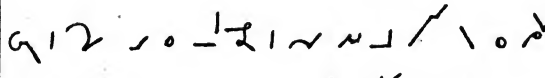
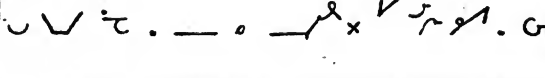
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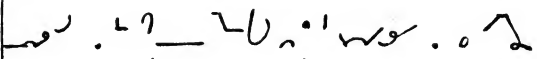
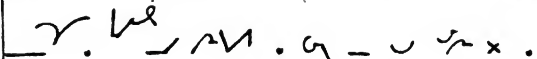

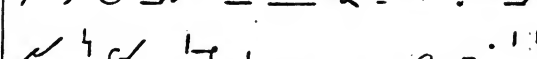
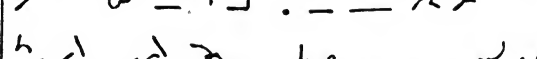
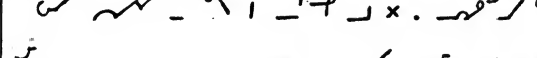
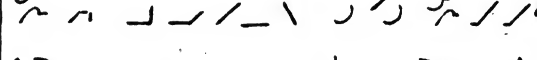
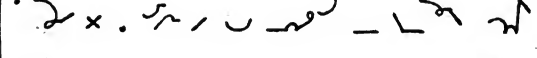
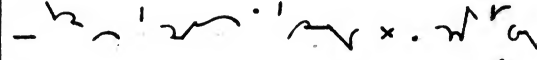



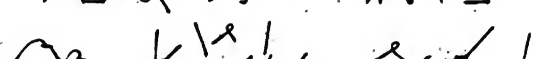
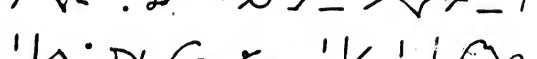
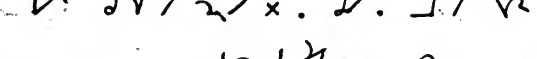
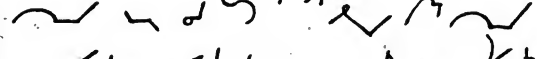
Pfalm III

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Genefis Chap.XL

1. וְיָהוָה אֱלֹהִים יִבְרָא אֶת-הָאָדָם.
2. וְיִבְרָא אֶת-הָאָדָם. וְיִבְרָא אֶת-הָאָדָם.
3. וְיִבְרָא אֶת-הָאָדָם. וְיִבְרָא אֶת-הָאָדָם.
4. וְיִבְרָא אֶת-הָאָדָם. וְיִבְרָא אֶת-הָאָדָם.
5. וְיִבְרָא אֶת-הָאָדָם. וְיִבְרָא אֶת-הָאָדָם.
6. וְיִבְרָא אֶת-הָאָדָם. וְיִבְרָא אֶת-הָאָדָם.
7. וְיִבְרָא אֶת-הָאָדָם. וְיִבְרָא אֶת-הָאָדָם.

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20	<p>  </p> <p>  </p>
21	<p>  </p> <p>  </p>

- 22 ۱. ۲. ۳. ۴. ۵. ۶. ۷. ۸. ۹. ۱۰. ۱۱. ۱۲. ۱۳. ۱۴. ۱۵. ۱۶. ۱۷. ۱۸. ۱۹. ۲۰. ۲۱. ۲۲. ۲۳. ۲۴. ۲۵. ۲۶. ۲۷. ۲۸. ۲۹. ۳۰
- 23 ۱. ۲. ۳. ۴. ۵. ۶. ۷. ۸. ۹. ۱۰. ۱۱. ۱۲. ۱۳. ۱۴. ۱۵. ۱۶. ۱۷. ۱۸. ۱۹. ۲۰. ۲۱. ۲۲. ۲۳. ۲۴. ۲۵. ۲۶. ۲۷. ۲۸. ۲۹. ۳۰
- 24 ۱. ۲. ۳. ۴. ۵. ۶. ۷. ۸. ۹. ۱۰. ۱۱. ۱۲. ۱۳. ۱۴. ۱۵. ۱۶. ۱۷. ۱۸. ۱۹. ۲۰. ۲۱. ۲۲. ۲۳. ۲۴. ۲۵. ۲۶. ۲۷. ۲۸. ۲۹. ۳۰
- 25 ۱. ۲. ۳. ۴. ۵. ۶. ۷. ۸. ۹. ۱۰. ۱۱. ۱۲. ۱۳. ۱۴. ۱۵. ۱۶. ۱۷. ۱۸. ۱۹. ۲۰. ۲۱. ۲۲. ۲۳. ۲۴. ۲۵. ۲۶. ۲۷. ۲۸. ۲۹. ۳۰
- 26 ۱. ۲. ۳. ۴. ۵. ۶. ۷. ۸. ۹. ۱۰. ۱۱. ۱۲. ۱۳. ۱۴. ۱۵. ۱۶. ۱۷. ۱۸. ۱۹. ۲۰. ۲۱. ۲۲. ۲۳. ۲۴. ۲۵. ۲۶. ۲۷. ۲۸. ۲۹. ۳۰
- 27 ۱. ۲. ۳. ۴. ۵. ۶. ۷. ۸. ۹. ۱۰. ۱۱. ۱۲. ۱۳. ۱۴. ۱۵. ۱۶. ۱۷. ۱۸. ۱۹. ۲۰. ۲۱. ۲۲. ۲۳. ۲۴. ۲۵. ۲۶. ۲۷. ۲۸. ۲۹. ۳۰
- 28 ۱. ۲. ۳. ۴. ۵. ۶. ۷. ۸. ۹. ۱۰. ۱۱. ۱۲. ۱۳. ۱۴. ۱۵. ۱۶. ۱۷. ۱۸. ۱۹. ۲۰. ۲۱. ۲۲. ۲۳. ۲۴. ۲۵. ۲۶. ۲۷. ۲۸. ۲۹. ۳۰
- 29 ۱. ۲. ۳. ۴. ۵. ۶. ۷. ۸. ۹. ۱۰. ۱۱. ۱۲. ۱۳. ۱۴. ۱۵. ۱۶. ۱۷. ۱۸. ۱۹. ۲۰. ۲۱. ۲۲. ۲۳. ۲۴. ۲۵. ۲۶. ۲۷. ۲۸. ۲۹. ۳۰
- 30 ۱. ۲. ۳. ۴. ۵. ۶. ۷. ۸. ۹. ۱۰. ۱۱. ۱۲. ۱۳. ۱۴. ۱۵. ۱۶. ۱۷. ۱۸. ۱۹. ۲۰. ۲۱. ۲۲. ۲۳. ۲۴. ۲۵. ۲۶. ۲۷. ۲۸. ۲۹. ۳۰

$\text{rev} = \text{'L'}. \text{'N'} / \text{'am'}$

31 V_x, W, V, V_2

32 4 7 6 5 4 3 2 1

1. 7/20/21 12:30 PM

11. $\frac{1}{2} \sqrt{2} \approx 0.707$

33 2 x ~ 1/2 | 1/2 h ~ V 1/2

34 . 1 — $\sqrt{1} \cdot \pi \times 1 \cdot 2 \cdot 1$.

— 21 in 4 1/2 hrs.

٢٠٠٧ - ٢٠٠٨

۱. ۴ سو در ۰ مسرا / طر ۲ / . 35

5/27/21: 1/2 m

36 ايسر ما' و' w، / مس ٤ x .

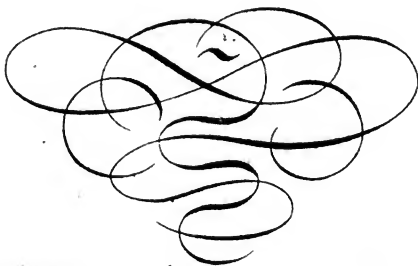
4. 1957-1958

37 $\frac{1}{2} - \frac{1}{3} = \frac{1}{6}$ $\frac{1}{2} - \frac{1}{3} = \frac{1}{6}$

38 . ن . - ج ا - ل م ن خ ه

[illegible]

- 53 $\sqrt{a} \cdot x \sqrt{a} - \sqrt{a} - \sqrt{a} - \sqrt{a} - \sqrt{a}$
 $\times \sqrt{a} - \sqrt{a} - \sqrt{a} - \sqrt{a} - \sqrt{a} - \sqrt{a}$
- 54 $\sqrt{a} - \sqrt{a} - \sqrt{a} - \sqrt{a} - \sqrt{a} - \sqrt{a}$
 $\sqrt{a} - \sqrt{a} - \sqrt{a} - \sqrt{a} - \sqrt{a} - \sqrt{a}$
- 55 $\sqrt{a} - \sqrt{a} - \sqrt{a} - \sqrt{a} - \sqrt{a} - \sqrt{a}$
 $\sqrt{a} - \sqrt{a} - \sqrt{a} - \sqrt{a} - \sqrt{a} - \sqrt{a}$
- 56 $\sqrt{a} - \sqrt{a} - \sqrt{a} - \sqrt{a} - \sqrt{a} - \sqrt{a}$
 $\sqrt{a} - \sqrt{a} - \sqrt{a} - \sqrt{a} - \sqrt{a} - \sqrt{a}$
- 57 $\sqrt{a} - \sqrt{a} - \sqrt{a} - \sqrt{a} - \sqrt{a} - \sqrt{a}$
 $\sqrt{a} - \sqrt{a} - \sqrt{a} - \sqrt{a} - \sqrt{a} - \sqrt{a}$



Genefis Chap. XLII

✓✓_an ✓ 4 r / cñ - 2V - an
 / u - an ✓ 9 h an an an x

2 . . / an - - an 4 r - cñ -
 2V 1 J W 4 r . 2 an) 4 r /

3 \ L . / - x . - an ✓ 2V / an W 1

4 2 cñ - 2V x 7 2 V - an an an
 an / / 2V an / h - 2V / 2V

5 an - x . an . an an 1 2 cñ
 an an 4 an / an / - an an

6 x . - an / an an an . .
 / 4 an 1 1 1 / . an . an

an . an an (2 an - / an an 1 6

16. ...
 17. ...
 18. ...
 19. ...
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	/ (. h) k m . n _ r r
25	q x ⁴ m d a m r e / c h . i
	m o . v h _ a _ r . u k v /
26	r / . h _ o u k x . ⁴ q r e / c h
27	. r k x . r m . k v _ r r a _ r r
	v _ ' _ o m _ h r / k r /
28	_ r h x . o , u _ ⁴ v _ h _
	m . h _ _ v _ _ r . r k r
	. ⁴ m r a m r a m r a m r a
29	u ~ x . ⁴ a u _ a r k r
30	. h _ ⁴ a k u x ' v r ' i
	. k m m u a . m r r
31	m . ⁴ u x . / , _ / r h v
32	r r r x r r r r r r r r r r
	h _ r r / r r r r r r r r
33	. q x . ' v ' . ⁴ u , u r _ r

- 34
35
36
37
38

וְיָשָׁב אֶל-אֱלֹהֵינוּ

Genesis Chap. XLIII

2 וְיָשָׁב אֶל-אֱלֹהֵינוּ

וְיָשָׁב אֶל-אֱלֹהֵינוּ

3 וְיָשָׁב אֶל-אֱלֹהֵינוּ

וְיָשָׁב אֶל-אֱלֹהֵינוּ

וְיָשָׁב אֶל-אֱלֹהֵינוּ

4 וְיָשָׁב אֶל-אֱלֹהֵינוּ

5 וְיָשָׁב אֶל-אֱלֹהֵינוּ

וְיָשָׁב אֶל-אֱלֹהֵינוּ

6 וְיָשָׁב אֶל-אֱלֹהֵינוּ

וְיָשָׁב אֶל-אֱלֹהֵינוּ

7 וְיָשָׁב אֶל-אֱלֹהֵינוּ

20 . ' w x . / o f / G z w t ' n

21 | 4 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1038 1039

1. 4/22/2020

$\psi_1 = \frac{1}{\sqrt{2}}(\phi_1 + \phi_2)$

22 $\nearrow \cdot \nearrow _ _ \searrow _ _ \cdot \times \cdot \cdot$

— 17 —

23 | 9 7 4 5 6 - 8 10 x . 0, 2 7

سوۛ ڪم ڪم : را . ر م / م ر ا

۱۰. لکھنؤ - راجستھان - بھارت

24 $\sqrt{2} \times \sqrt{2} = 2$

— 3 . 5 6 7 8 9 . 0 5

25 | $\sqrt{x} \cdot \ln x$

26 97 ✓ ✓ L R H L Y 2 r x . ✓

— 17 —

27 - 1' - 2.22 1 - 1' 6 x .0

Handwritten musical notation on a staff.

Genefis Chap. XLV

- ✓ — — — — —
 — — — — —
 . — — — — —
 2) — — — — —
 3 . — — — — —
 — — — — —
 4 — — — — —
 — — — — —
 5 — — — — —
 — — — — —
 — — — — —

6 א. מ' - ח' נ' ו' ס' ע' פ' צ' ק' ר' ש' ת' י' י"א

ס' ע' פ' צ' ק' ר' ש' ת' י' י"א

7 י' י"א - ח' נ' ו' ס' ע' פ' צ' ק' ר' ש' ת' י' י"א

ח' נ' ו' ס' ע' פ' צ' ק' ר' ש' ת' י' י"א

8 א' ב' ג' ד' ה' ו' ז' ח' ט' י' י"א

י' י"א - ח' נ' ו' ס' ע' פ' צ' ק' ר' ש' ת' י' י"א

י' י"א - ח' נ' ו' ס' ע' פ' צ' ק' ר' ש' ת' י' י"א

9 א' ב' ג' ד' ה' ו' ז' ח' ט' י' י"א

י' י"א - ח' נ' ו' ס' ע' פ' צ' ק' ר' ש' ת' י' י"א

10 א' ב' ג' ד' ה' ו' ז' ח' ט' י' י"א

י' י"א - ח' נ' ו' ס' ע' פ' צ' ק' ר' ש' ת' י' י"א

י' י"א - ח' נ' ו' ס' ע' פ' צ' ק' ר' ש' ת' י' י"א

11 א' ב' ג' ד' ה' ו' ז' ח' ט' י' י"א

י' י"א - ח' נ' ו' ס' ע' פ' צ' ק' ר' ש' ת' י' י"א

12 א' ב' ג' ד' ה' ו' ז' ח' ט' י' י"א

י' י"א - ח' נ' ו' ס' ע' פ' צ' ק' ר' ש' ת' י' י"א

- 13 $\text{L} \text{h}^1 \text{4} \text{2}^1 \text{u} \text{u} \text{x} . \text{u} \text{q} \text{L} \text{r}$
 $\text{1} \text{L} - \text{2} . \text{1}^1 \text{u} - \text{3} .$
- 14 $\text{9} \text{1}^1 . \text{u} \text{L} \text{r} \text{x} . \text{o}$
 $\text{h} - \text{2}^1 \text{u} \text{L} \text{r} . \text{u} . \text{2} \text{L}$
- 15 $\text{u} \text{h} - \text{u} \text{x} \text{h} \text{2} . \text{u} \text{L}$
 $\text{2} \text{L} . \text{u} \text{h} . \text{u} \text{L} . \text{u} \text{L}$
- 16 $\text{1} - \text{x} . \text{u}^1 \text{u}^1 \text{u}^1 \text{u}^1$
 $\text{u} \text{L} \text{r} . \text{u} \text{L} \text{r} . \text{u} \text{L} \text{r}$
- 17 $\text{u} \text{L} \text{r} . \text{u} \text{L} \text{r} . \text{u} \text{L} \text{r}$
 $\text{u} \text{L} \text{r} . \text{u} \text{L} \text{r} . \text{u} \text{L} \text{r}$
- 18 $\text{u} \text{L} \text{r} . \text{u} \text{L} \text{r} . \text{u} \text{L} \text{r}$
 $\text{u} \text{L} \text{r} . \text{u} \text{L} \text{r} . \text{u} \text{L} \text{r}$
- 19 $\text{u} \text{L} \text{r} . \text{u} \text{L} \text{r} . \text{u} \text{L} \text{r}$
 $\text{u} \text{L} \text{r} . \text{u} \text{L} \text{r} . \text{u} \text{L} \text{r}$
- 20 $\text{u} \text{L} \text{r} . \text{u} \text{L} \text{r} . \text{u} \text{L} \text{r}$
 $\text{u} \text{L} \text{r} . \text{u} \text{L} \text{r} . \text{u} \text{L} \text{r}$

[illegible]

21 | $\sqrt{x} \cdot \sqrt{y} = \sqrt{xy}$

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22 $\frac{1}{x} \cdot 1 = \frac{1}{x}$

معتمد من قبل وزارة التعليم العالي والبحث العلمي

23. $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$

١٥ ر ا / ١٦ ف و ١٧ ص ١٨ ط ١٩ ز ٢٠

لا. 2. ص. 1/2/3/4/5/6/7/8/9/10/11/12/13/14/15/16/17/18/19/20/21/22/23/24/25/26/27/28/29/30/31/32/33/34/35/36/37/38/39/40/41/42/43/44/45/46/47/48/49/50/51/52/53/54/55/56/57/58/59/60/61/62/63/64/65/66/67/68/69/70/71/72/73/74/75/76/77/78/79/80/81/82/83/84/85/86/87/88/89/90/91/92/93/94/95/96/97/98/99/100/101/102/103/104/105/106/107/108/109/110/111/112/113/114/115/116/117/118/119/120/121/122/123/124/125/126/127/128/129/130/131/132/133/134/135/136/137/138/139/140/141/142/143/144/145/146/147/148/149/150/151/152/153/154/155/156/157/158/159/160/161/162/163/164/165/166/167/168/169/170/171/172/173/174/175/176/177/178/179/180/181/182/183/184/185/186/187/188/189/190/191/192/193/194/195/196/197/198/199/200/201/202/203/204/205/206/207/208/209/210/211/212/213/214/215/216/217/218/219/220/221/222/223/224/225/226/227/228/229/230/231/232/233/234/235/236/237/238/239/240/241/242/243/244/245/246/247/248/249/250/251/252/253/254/255/256/257/258/259/260/261/262/263/264/265/266/267/268/269/270/271/272/273/274/275/276/277/278/279/280/281/282/283/284/285/286/287/288/289/290/291/292/293/294/295/296/297/298/299/300/301/302/303/304/305/306/307/308/309/310/311/312/313/314/315/316/317/318/319/320/321/322/323/324/325/326/327/328/329/330/331/332/333/334/335/336/337/338/339/340/341/342/343/344/345/346/347/348/349/350/351/352/353/354/355/356/357/358/359/360/361/362/363/364/365/366/367/368/369/370/371/372/373/374/375/376/377/378/379/380/381/382/383/384/385/386/387/388/389/390/391/392/393/394/395/396/397/398/399/400/401/402/403/404/405/406/407/408/409/410/411/412/413/414/415/416/417/418/419/420/421/422/423/424/425/426/427/428/429/430/431/432/433/434/435/436/437/438/439/440/441/442/443/444/445/446/447/448/449/450/451/452/453/454/455/456/457/458/459/460/461/462/463/464/465/466/467/468/469/470/471/472/473/474/475/476/477/478/479/480/481/482/483/484/485/486/487/488/489/490/491/492/493/494/495/496/497/498/499/500/501/502/503/504/505/506/507/508/509/510/511/512/513/514/515/516/517/518/519/520/521/522/523/524/525/526/527/528/529/530/531/532/533/534/535/536/537/538/539/540/541/542/543/544/545/546/547/548/549/550/551/552/553/554/555/556/557/558/559/560/561/562/563/564/565/566/567/568/569/570/571/572/573/574/575/576/577/578/579/580/581/582/583/584/585/586/587/588/589/590/591/592/593/594/595/596/597/598/599/600/601/602/603/604/605/606/607/608/609/610/611/612/613/614/615/616/617/618/619/620/621/622/623/624/625/626/627/628/629/630/631/632/633/634/635/636/637/638/639/640/641/642/643/644/645/646/647/648/649/650/651/652/653/654/655/656/657/658/659/660/661/662/663/664/665/666/667/668/669/670/671/672/673/674/675/676/677/678/679/680/681/682/683/684/685/686/687/688/689/690/691/692/693/694/695/696/697/698/699/700/701/702/703/704/705/706/707/708/709/710/711/712/713/714/715/716/717/718/719/720/721/722/723/724/725/726/727/728/729/730/731/732/733/734/735/736/737/738/739/740/741/742/743/744/745/746/747/748/749/750/751/752/753/754/755/756/757/758/759/760/761/762/763/764/765/766/767/768/769/770/771/772/773/774/775/776/777/778/779/780/781/782/783/784/785/786/787/788/789/790/791/792/793/794/795/796/797/798/799/800/801/802/803/804/805/806/807/808/809/810/811/812/813/814/815/816/817/818/819/820/821/822/823/824/825/826/827/828/829/830/831/832/833/834/835/836/837/838/839/840/841/842/843/844/845/846/847/848/849/850/851/852/853/854/855/856/857/858/859/860/861/862/863/864/865/866/867/868/869/870/871/872/873/874/875/876/877/878/879/880/881/882/883/884/885/886/887/888/889/890/891/892/893/894/895/896/897/898/899/900/901/902/903/904/905/906/907/908/909/910/911/912/913/914/915/916/917/918/919/920/921/922/923/924/925/926/927/928/929/930/931/932/933/934/935/936/937/938/939/940/941/942/943/944/945/946/947/948/949/950/951/952/953/954/955/956/957/958/959/960/961/962/963/964/965/966/967/968/969/970/971/972/973/974/975/976/977/978/979/980/981/982/983/984/985/986/987/988/989/990/991/992/993/994/995/996/997/998/999/1000/1001/1002/1003/1004/1005/1006/1007/1008/1009/1010/1011/1012/1013/1014/1015/1016/1017/1018/1019/1020/1021/1022/1023/1024/1025/1026/1027/1028/1029/1030/1031/1032/1033/1034/1035/1036/1037/1038/103

24 $\Gamma \cup \Gamma' \subset X$

4.7.01.01, 49/102

25' / x . L / y n . o -

26 $\sqrt{2} \times 10^{-5}$ m

12. 0 - 4/5

$\frac{1}{\sqrt{2}} \cdot \frac{\pi}{2} = \frac{\pi}{2\sqrt{2}}$

27 $\angle x$. $\angle w$ — 7! $\angle z$.

$\frac{1}{\sqrt{2}}, \frac{\sqrt{2}}{2}, \frac{1}{\sqrt{2}}, \frac{\sqrt{2}}{2}$

28

28 x

Genefis Chap.L

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3 x

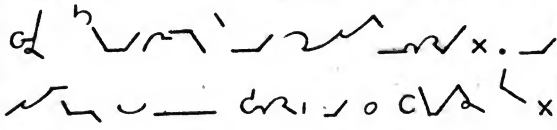
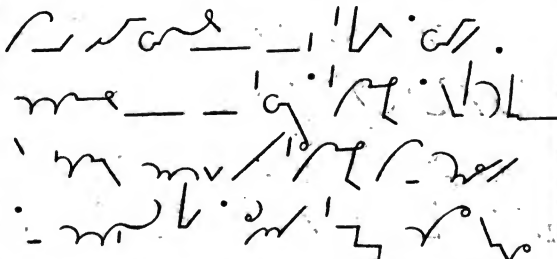
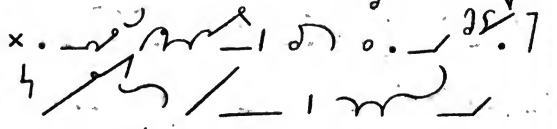
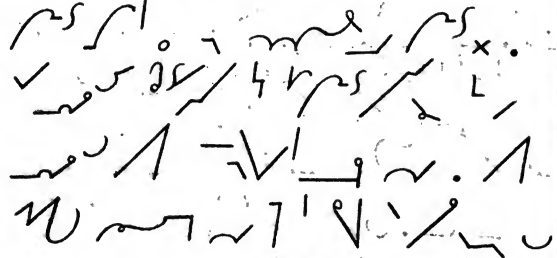
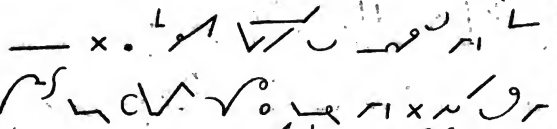
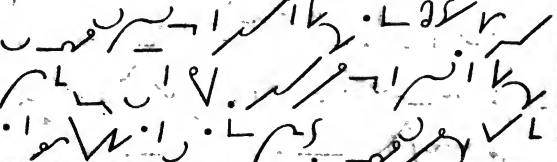
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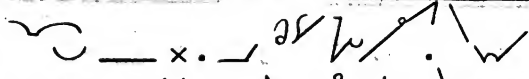


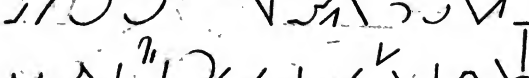
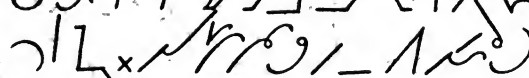
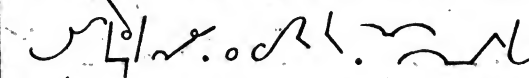
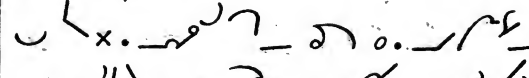

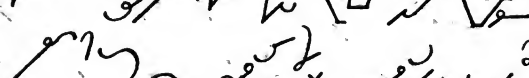

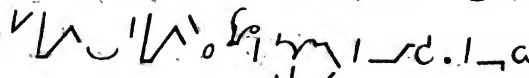



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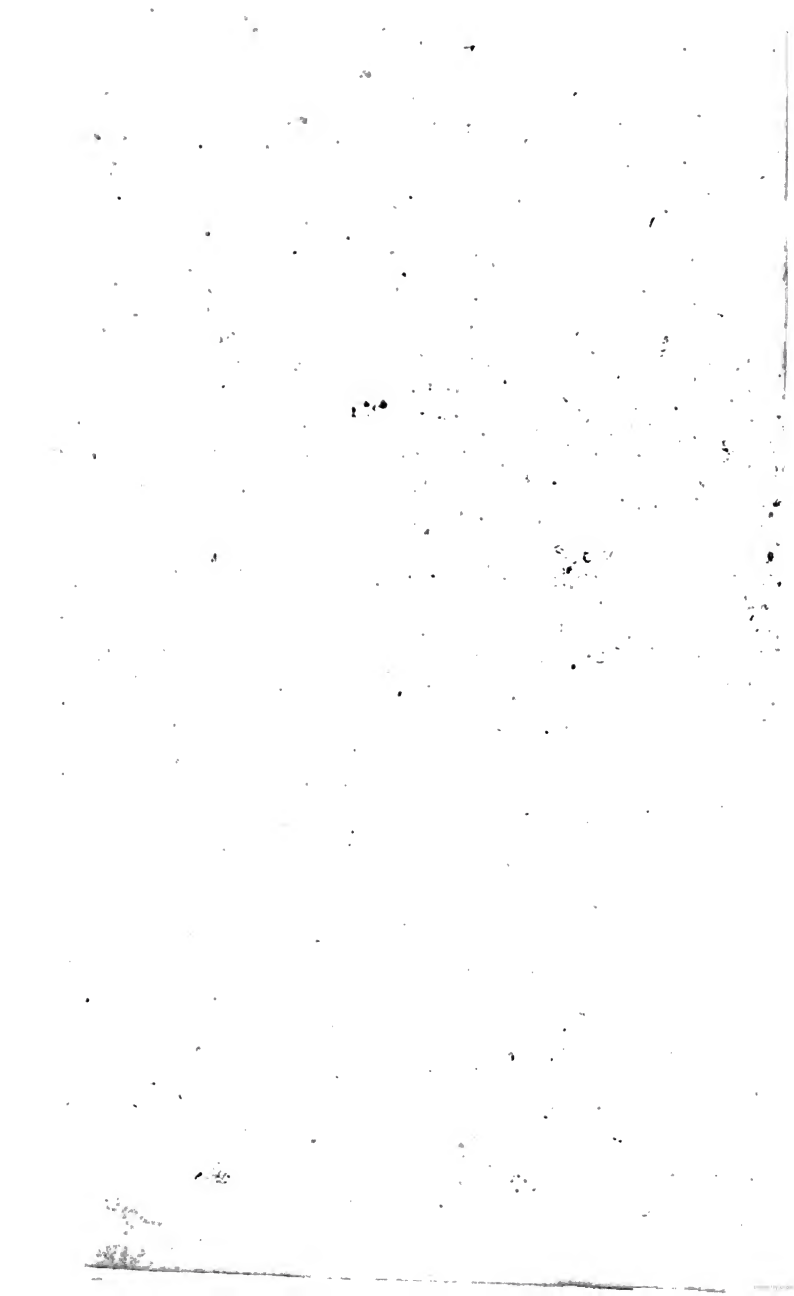
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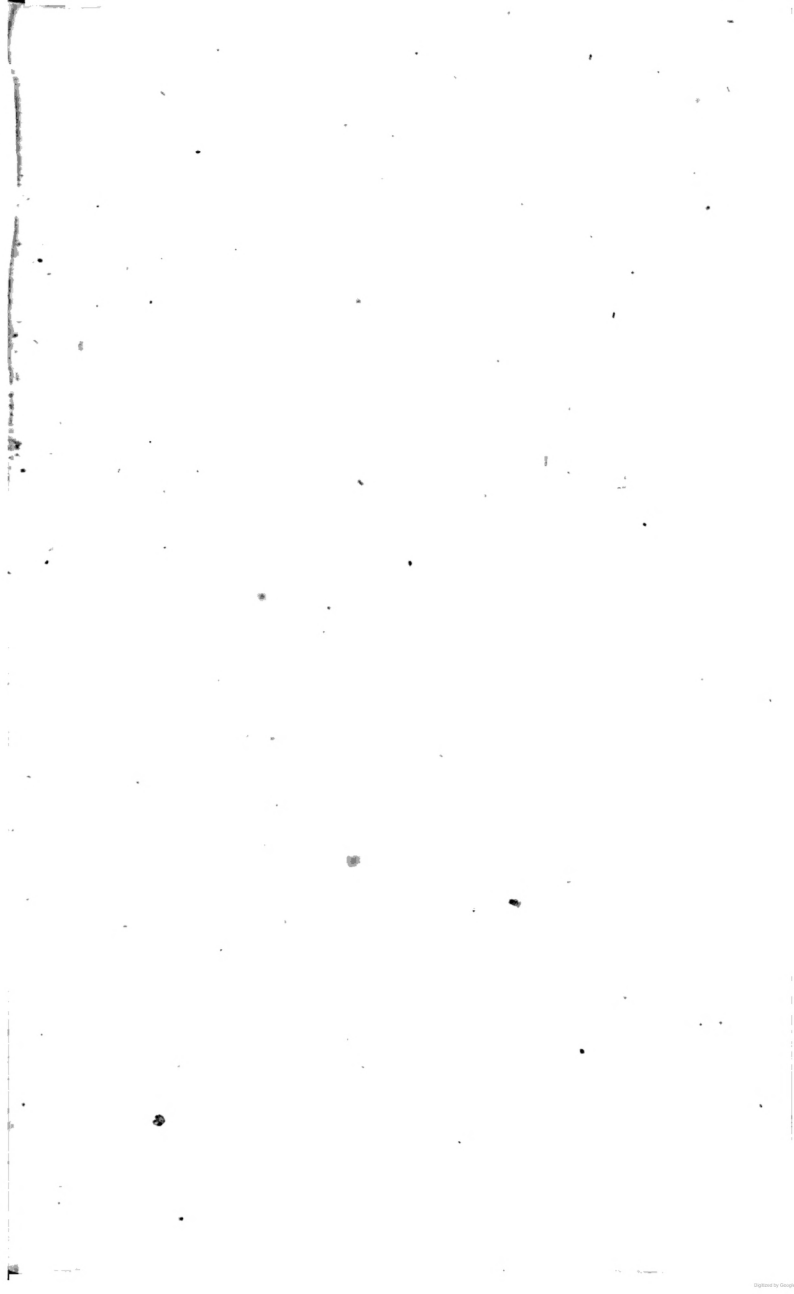
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